8. A device for establishing flow communication between a first portion of a coronary artery and a second portion of a coronary artery located on opposite sides of a blockage, comprising:

a first conduit device located at the first portion of the coronary artery and configured to establish flow communication between a coronary artery interior and an exterior to the coronary artery;

a second conduit device located at the second portion of the coronary artery and configured to establish flow communication between the coronary artery interior and the exterior of the coronary artery;

a vessel having a first end and a second end; and

first and second vessel disc members respectively attached to each of the first end and the second end of the vessel, each of the vessel disc members configured to engage with a conduit device disc member of each of the first and second conduit devices, respectively, to establish flow communication between the first conduit device and the second conduit device through the vessel exterior to the coronary artery.

9. A stent for placement in a heart wall to establish flow communication between a chamber of the heart and a coronary vessel, comprising:

a hollow conduit, wherein at least a portion of the hollow conduit has a parallelpiped configuration; and

a movable flap disposed at an end of said conduit proximate the portion having the parallelpiped configuration, the movable flap being configured to control blood flow through the conduit when the conduit is placed in the heart wall.

LAW OFFICES
FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000

10. A conduit for connecting a heart chamber to a coronary vessel, comprising:

an access port disposed in a wall surrounding the heart chamber, the access port having a first end disposed in the heart chamber, a second end disposed external to the heart chamber, and a flange portion disposed around the access port and configured to be disposed adjacent an outer surface of the heart wall; and

a hollow graft segment having one end connected to the second end of the access port and the other end anastomosed to the coronary vessel.

11. A shunt device for providing flow communication between a heart chamber and a coronary vessel, comprising

a hollow conduit disposed in the myocardium, the conduit having a first end defining a first aperture disposed in the heart chamber and a second end disposed external to the coronary vessel, said conduit extending through a heart wall surrounding the chamber and across the coronary vessel between the first and second ends;

the conduit defining a second aperture disposed on a surface of the conduit disposed in said coronary vessel; and

a head portion attached to the second end of the conduit, said head portion configured to abut the coronary vessel to seal an opening in the coronary vessel created by the conduit and to prevent movement of the conduit within the coronary vessel.

LAW OFFICES
FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000

12. A stent for establishing flow communication between a heart chamber and a coronary vessel, comprising:

a hollow conduit having a varying wall thickness disposed in a heart wall surrounding the heart chamber, the conduit having a first end disposed in the heart chamber, and a second end disposed in the coronary vessel,

wherein said conduit includes a bend located between said first end and said second end, and wherein the conduit defines a lumen that tapers from a largest diameter at the second end to a smallest diameter proximal the first end, and further wherein the wall of the conduit at the first end has a radius of curvature.

13. A stent for establishing flow communication between a heart chamber and a coronary vessel, comprising:

a curved hollow conduit disposed in a heart wall surrounding the chamber and having a first apertured end disposed in the heart chamber and a second apertured end disposed in the coronary vessel,

wherein said conduit defines a spiral flow path for blood flow between the heart chamber and the coronary vessel.

14. A stent for establishing flow communication between a heart chamber and a coronary vessel, comprising

a hollow conduit disposed in a heart wall surrounding the chamber, the conduit having a first end configured to be disposed in one of the heart chamber and the

LAW OFFICES
FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000

coronary vessel, and a second end configured to be disposed in the other of the heart chamber and the coronary vessel; and

wherein the hollow conduit defines a vortex chamber disposed between the first end and the second end, the vortex chamber configured to establish flow communication between the first end and the second end,

wherein the first end includes an axial flow port in the vortex chamber and the second end includes a tangential flow port in the vortex chamber.

15. A method of providing direct blood flow between a heart chamber and a coronary vessel, the method comprising the steps of:

inserting an instrument through an anterior wall of the coronary vessel to form an anterior wall aperture;

further inserting the instrument through a posterior wall of the coronary vessel and a heart wall between the heart chamber and the coronary vessel to form a passageway in the heart wall; and

inserting a stent within the passageway.--

LAW OFFICES
FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000